AMENDMENTS TO THE CLAIMS

1-76. **(Canceled)**

77. **(Previously Presented)** The method according to claim 133, wherein the foreign T_H epitope is immunodominant in the animal.

78. **(Previously Presented)** The method according to claim 133, wherein the foreign T_H epitope is promiscuous.

79. **(Previously Presented)** The method according to claim 78, wherein the at least one foreign T_H epitope is selected from a natural promiscuous T-cell epitope and an artificial MHC-II binding peptide sequence.

80. **(Currently Amended)** The method according to claim 79, wherein the natural T_H epitope is selected from the group consisting of a Tetanus toxoid epitope such as P2 or P30, a diphtheria toxoid epitope, an influenza virus hemagluttinin epitope, and a *P. falciparum* CS epitope.

81 - 84. **(Cancelled)**

85. **(Currently Amended)** The method according to claim 133, wherein the T_H epitope-containing IL5 polypeptide ~~has been modified to introduce the~~ comprises a foreign T_H epitope in at least one of loops 1-3 or in the amino acid residues C-terminal to helix D, said loops and said helix D corresponding to those shown in Fig. 3 for human and murine IL5.

86. **(Previously Presented)** The method according to claim 85, wherein the IL5 polypeptide is a human IL5 polypeptide.

87. **(Previously Presented)** The method according to claim 86, wherein the human IL5 polypeptide has been modified by substituting at least one amino acid sequence in SEQ ID NO: 1

with at least one amino acid sequence of equal or different length thereby giving rise to a foreign T_H epitope, wherein substituted amino acid residues are selected from the group consisting of residues 87-90, residues 88-91, residues 32-43, residues 33-43, residues 59-64, residues 86-91, and residues 110-113.

88. **(Cancelled)**

89. **(Currently Amended)** The method according to claim 133, wherein the T_H epitope-containing IL-5 ~~analogue has been formulated~~ polypeptide is administered together with an adjuvant which facilitates breaking of autotolerance to autoantigens.

90. **(Currently Amended)** The method according to claim 89, wherein the adjuvant is selected from the group consisting of an immune targeting adjuvant; an immune modulating adjuvant ~~such as a toxin, a cytokine and a mycobacterial derivative~~; an oil formulation; a polymer; a micelle forming adjuvant; a saponin; an immunostimulating complex matrix (an ISCOM matrix); a particle; DDA; aluminium adjuvants; DNA adjuvants; γ-inulin; and an encapsulating adjuvant.

91. **(Currently Amended)** The method according to claim 133, wherein an effective amount of the T_H epitope-containing IL5 ~~analogue~~ polypeptide is administered to the animal via a route selected from the parenteral route such as the intradermal, the subdermal, the intracutaneous, the subcutaneous, and the intramuscular routes; the peritoneal route; the oral route; the buccal route; the sublinqual route; the epidural route; the spinal route; the anal route; and the intracranial route.

92. **(Currently Amended)** The method according to claim 91, wherein the effective amount is between 0.5 μg and 2,000 μg of the IL5 analogue~~, the subsequence thereof or the analogue thereof~~.

93. **(Currently Amended)**The method according to claim 91, which includes at least one administration of the IL5 analogue per year~~, such as at least 2, at least 3, at least 4, at least 6, and at least 12 administrations per year~~.

94. **(Previously Presented)**The method according to claim 91, wherein the IL5 analogue is contained in a virtual lymph node (VLN) device.

95. **(Currently Amended)** The method according to claim 90, wherein said immune modulating adjuvant is a member selected from the group consisting of a toxin, acytokine and a mycobacterial derivative ~~133, wherein presentation of said IL-5 analogue to the immune system is effected by introducing nucleic acid(s) encoding the modified IL5 into the animal's cells and thereby obtaining *in vivo* expression by the cells of the nucleic acid(s) introduced~~.

96-99. **(Cancelled)**

100. **(Currently Amended)** A method for treating asthma or other chronic allergic conditions characterized by eosinophilia, the method comprising administering to a patient in need thereof an immunogenically effective amount of

- at least one T_H eptitope-containing IL-5 polypeptide wherein said T_H eptitope-containing IL-5 polypeptide differs from the animal's autologous IL-5 polypeptide in that the T_H eptitope-containing IL-5 polypeptide comprises at least one foreign T_H eptitope inserted into the amino acid sequence of the animal's autologous IL-5 polypeptide, whereby immunization of the animal with the T_H eptitope-containing IL-5 polypeptide produces antibodies against the animal's autologous IL-5 polypeptide and whereby said T_H eptitope-containing IL-5 polypeptide reacts to the same extent with an antiserum raised against the animal's autologous IL-5 as does the autologous IL-5~~down-regulating IL5 activity according to the method according to claim 133 to such an extent that the number of eosinophil cells, either systemically or locally at the disease focus, is significantly reduced, such as a reduction of at least 20%~~.

101-132. **(Cancelled)**

133. **(Currently Amended)** A method of *in vivo* down-regulation of interleukin 5 (IL5) activity in an animal, including a human being, the method comprising ~~presenting~~administering an immunogenically effective amount of

- at least one T_H eptitope-containing IL-5 polypeptide~~analogue~~ wherein ~~at least one foreign~~said T_H eptitope-containing IL-5 polypeptide differs from the animal's autologous IL-5 polypeptide in that the T_H eptitope-containing IL-5 polypeptide comprises at least one foreign T_H eptitope proposed ~~is introduced, while preserving a substantial fraction of IL-5 B-cell epitopes,~~ into the amino acid sequence of the animal's autologous IL-5 polypeptide, whereby immunization of the animal with the T_H eptitope-containing IL-5 polypeptide ~~analogue~~ produces antibodies against the animal's autologous IL-5 polypeptide and whereby said T_H eptitope-containing IL-5 polypeptide reacts to the same extent with an antiserum raised against the animal's autologous IL-5 as does the autologous IL-5.

134 – 141. **(Cancelled)**